IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

SONRAI MEMORY LIMITED, *Plaintiff,*	§	
-v-	§	**6-21-CV-01284-ADA-DTG**
KINGSTON TECHNOLOGY COMPANY, INC., KINGSTON TECHNOLOGY CORPORATION, *Defendants.*	§	

CLAIM CONSTRUCTION ORDER AND MEMORANDUM IN SUPPORT THEREOF

Before the Court are the parties' claim construction briefs: Defendants Kingston Technology Company, Inc. and Kingston Technology Corporation's Opening and Reply briefs (ECF Nos. 63 and 66 respectively) and Plaintiff Sonrai Memory Limited's Response and Sur-Reply briefs (ECF Nos. 64 and 69, respectively). United States District Judge Alan D Albright referred this case to the undersigned on June 21, 2022. ECF No. 72. The Court provided preliminary constructions for the disputed terms prior to the hearing. The Court held the *Markman* hearing on June 30, 2022. ECF No. 75. During that hearing, the Court informed the parties of the final constructions for the disputed terms. *Id.* This Order does not alter any of those constructions.

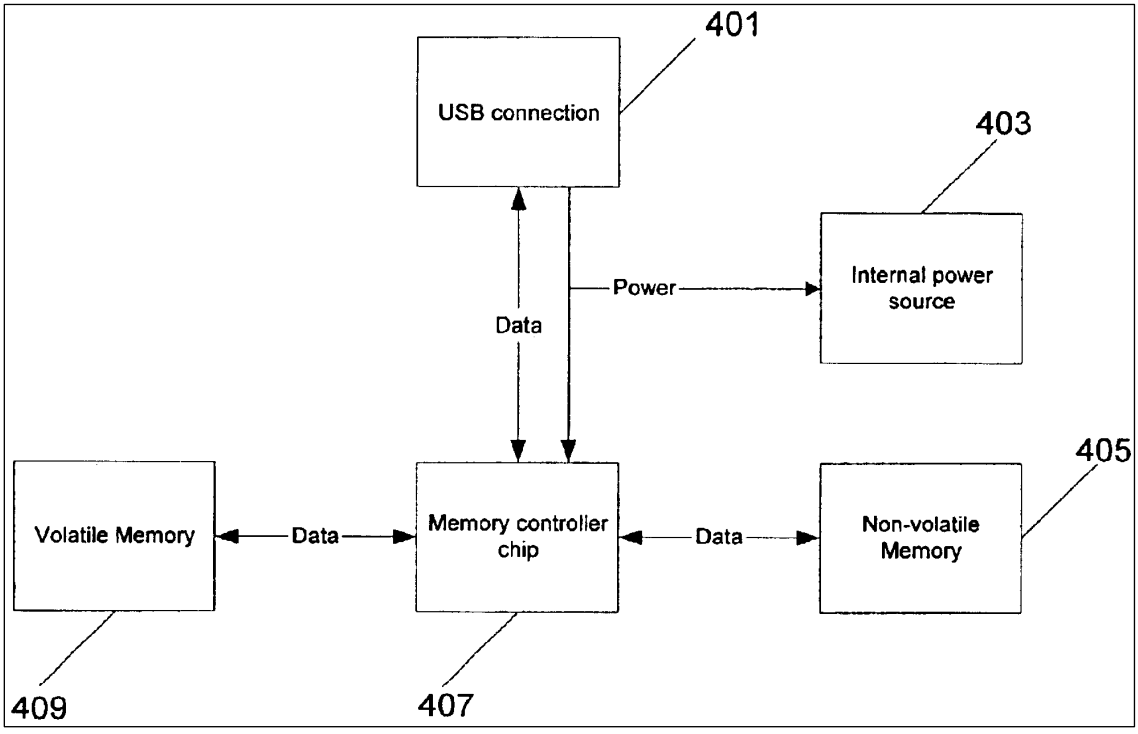
I. BACKGROUND

Plaintiff asserts U.S. Patent Nos. 6,724,241 and 6,920,527. The parties do not have any claim construction disputes related to the former patent. ECF No. 70 at 2. With respect to the latter patent, Judge Albright construed two of the below terms in co-pending cases in the Western District of Texas. *See, e.g.*, *Sonrai Memory Ltd. v. KIOXIA Corp.*, Case No. 6-21-cv-00400, ECF No. 55 at 58 (W.D. Tex. Feb. 28, 2022). Judge Albright held a *Markman* hearing in the co-pending

cases on February 28, 2022 and entered his final constructions for the disputed terms. *See, e.g.*, *id*. Of the five terms in dispute in this case, Judge Albright construed two of those terms (Term #3: "when said connector couples said portable memory apparatus to said computer system" and Term #5: "wherein said memory controller chip transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system"). *Id.* at 6–7.

II. DESCRIPTION OF THE ASSERTED PATENTS

The '527 Patent describes and claims a "portable RAM drive comprising data stored on a non-volatile memory and transferable to a volatile memory when the portable RAM drive is coupled to a computer system." Abstract. Figure 4 depicts an exemplary embodiment comprising multiple components.



USB connection 401 connects the portable RAM drive to the computer, and may provide power to recharge internal power source 403. 3:4–7, 3:10–11. The specification describes that after the portable RAM drive is coupled to a computer system, the memory controller chip copies data from the non-volatile memory to the volatile memory. 4:2–5. The purpose of caching a subset of data in the non-volatile memory into the volatile memory is to improve the read/write bandwidth between the computer and the portable RAM drive. *See, e.g.*, 4:22–27. More specifically, because the access speed of volatile memory is typically significantly higher than the access speed of non-volatile memory, copying a portion of the data stored on the non-volatile memory to the volatile memory reduces the access time—thus increasing the bandwidth—to read and write data to the portable RAM drive. *See id.* To maintain coherency between volatile memory and the non-volatile memory, *e.g.*, to ensure that data newly written to the volatile memory is stored on the non-volatile memory (which is necessary as the data will be lost once power to the volatile memory is removed), the specification describes at least two approaches. *See id.* 4:31-42. In the first approach, which could be called the "write-through" approach, when the computer writes data to the volatile memory, the memory controller chip also writes that data through to the non-volatile memory as well. 4:31–33. As such, in the write-through approach, data in the volatile memory and non-volatile memory are perfectly synchronized. In the second approach, which could be called "write-back," the data in the volatile memory and the non-volatile memory are not perfectly synchronized. More specifically, when the computer writes data to the portable RAM drive, that data is stored in volatile memory only. When volatile memory is full, when the portable RAM drive is about to be disconnected, or even periodically, the memory controller chip "writes-back" some or all of the data in volatile memory into the non-volatile memory. Because the data in the volatile memory is not immediately written-back to the non-

volatile memory, at any given time, the two memories may contain different sets of data, *e.g.*, different versions of the same file, and thus are not synchronized. In order to ensure that the non-volatile memory stores the latest data, the memory controller chip "writes-back" the data in the volatile memory to non-volatile memory.

III. LEGAL STANDARD

A. General principles

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds*, 575 U.S. 959, 959 (2015) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (internal quotation omitted). The plain-and-ordinary meaning of a term is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1313.

The "only two exceptions to [the] general rule" that claim terms are construed according to their plain-and-ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). The Federal Circuit has counseled that "[t]he standards for finding lexicography and disavowal are exacting." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). To act as his/her own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "'clearly express an intent' to [define] the term." *Thorner,* 669 F.3d at 1365.

"Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Phillips*, 415 F.3d at 1317. "[D]istinguishing the claimed invention over the prior art, an applicant is indicating what a claim does not cover." *Spectrum Int'l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379 (Fed. Cir. 1998). The doctrine of prosecution disclaimer precludes a patentee from recapturing a specific meaning that was previously disclaimed during prosecution. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). "[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." *Id.* at 1325–26. Accordingly, when "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

"Although the specification may aid the court in interpreting the meaning of disputed claim language . . ., particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988). "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can be useful, it is "less significant than the intrinsic record in determining 'the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony may also be

helpful, but an expert's conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

B. Indefiniteness

"[I]ndefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application was filed. *Id.* at 911.

IV. LEGAL ANALYSIS

A. Term #1: "a memory controller" / "said memory controller" / "said memory controller chip"

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
#1: "a memory controller" / "said memory controller" / "said memory controller chip" U.S. Patent No. 6,920,527, Cls. 1, 6 Proposed by Defendants	"a memory controller chip"	Plain-and-ordinary meaning

The Parties' Positions:

Claims 1 and 6 provide (emphasis added):

1. A portable memory apparatus, comprising:
a housing;
a ***memory controller*** comprised in the housing;
a volatile memory coupled to said ***memory controller*** comprised in the housing;
a non-volatile memory coupled to said ***memory controller*** comprised in the housing;
a connector positioned on the housing, wherein said connector couples said portable memory apparatus to a computer system when said connector is plugged into said computer system; and
wherein, when said connector couples said portable memory apparatus to said computer system, said ***memory controller chip*** copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector.
6. The portable memory apparatus of claim 1, wherein said ***memory controller chip*** transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system.

The parties disagree whether the first three instances of "memory controller" must be a "memory controller chip." Response at 2–3. Plaintiff contends that it should be; Defendants disagree. *Id.* at 3. The parties' proposed constructions effectively argue for the following claim language:

Plaintiff's effective construction	**Defendants' effective construction**
1. A portable memory apparatus, comprising: a housing; a memory controller **chip** comprised in the housing; a volatile memory coupled to said memory controller **chip** comprised in the housing; a non-volatile memory coupled to said memory controller **chip** comprised in the housing; a connector positioned on the housing, wherein said connector couples said portable memory apparatus to a computer system when said connector is plugged into said computer system; and wherein, when said connector couples said portable memory apparatus to said computer system, said memory	1. A portable memory apparatus, comprising: a housing; a memory controller comprised in the housing; a volatile memory coupled to said memory controller comprised in the housing; a non-volatile memory coupled to said memory controller comprised in the housing; a connector positioned on the housing, wherein said connector couples said portable memory apparatus to a computer system when said connector is plugged into said computer system; and wherein, when said connector couples said portable memory apparatus to said computer system, said memory

controller chip copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector.	controller ~~**chip**~~ copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector.

The parties agree that there is not explicit antecedent basis for "said memory controller chip" earlier in the claim. Reply at 1; Sur-Reply at 1. Rather, the parties agree that there is some kind of error. Reply at 1 ("scrivener's error"); Sur-Reply at 1 ("the Federal Circuit has made clear that antecedent basis is ***not*** strictly necessary.") (emphasis in original). Despite the fact that the parties agree on these two points, neither party expressly argues for a judicial correction and Defendants only argue that the term is indefinite in the alternative. Reply at 1 n.1.

In its opening, Defendants appear to argue for their proposed construction by pointing to Claim 15—which uses the term "memory controller chip" throughout—as evidence that the Court should construe "memory controller chip" in Claim 1 as "memory controller," as "chip" appears only once in Claim 1. Opening at 3. Defendants further contend that "this construction would have been the understanding of a POSITA and is consistent with the usage in the specification as well as the patent tenet that a claim term have proper antecedent basis to avoid indefiniteness issues." *Id.*

In its response, Plaintiff contends that Defendants' proposed construction would read "chip" out of the claim all-together. Response at 3; Sur-Reply at 2–3. By contrast, Plaintiff contends that the "better interpretation" is that the "'said memory controller chip' imposes a limitation on the previously recited 'memory controller,' such that the recited 'memory controller,' must be a 'memory controller chip.'" Response at 3. Plaintiff further contends that Defendants provide no basis why Claim 1 should not require "chip," especially when Claims 6 and 13, both of which depend on Claim 1, recites a "chip." *Id.* at 3, Sur-Reply at 2–3. Plaintiff finally contends

that despite Defendants' allegations that "chip" was "misused," Defendants does not provide any evidence of that "misuse," but rather seems to understand that Claim 6 does refer to a "chip" of a memory controller. Response at 3.

In its reply, Defendants first contend that if the term does not mean memory controller, it is indefinite. Reply at 1. Defendants then contend that the patentee knew how to properly draft for antecedent basis. *Id.* In response to Plaintiff's argument that that the "tenet that "all claim terms are presumed to have meaning in a claim," Defendants contend that this is not an absolute rule. *Id.* at 2 (citing *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1300 (Fed. Cir. 2005)).

In its sur-reply, Plaintiff contends that "[c]ourts have additionally held that it is proper for terms to recite ***more*** detail than the identified antecedent basis, and that this additional detail limits the claims." Sur-Reply at 2 (emphasis in original). For example, Plaintiff cites to *Comcast Cable Commc'ns, LLC v. Sprint Commc'ns Co.* where the court found that "the video content signals" properly derived antecedent basis from the previously recited "video signals." 38 F. Supp.3d 589, 617 (E.D. Pa. 2014).

The Court's Analysis:

After reviewing the parties' arguments and considering the applicable law, the Court agrees with Plaintiff and adopts Plaintiff's proposed construction.

As an initial matter, the Court agrees with the parties that the term lacks antecedent basis. But "the lack of an antecedent basis does not render a claim indefinite as long as the claim apprises one of ordinary skill in the art of its scope, and therefore, serves the notice function required by § 112 ¶ 2." *In re Downing*, 754 F. App'x 988, 996 (Fed. Cir. 2018). Rather, whether a claim, "despite lack of explicit antecedent basis … nonetheless has a reasonably ascertainable meaning

must be decided in context." *Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006).

The Court does not find Defendants' arguments in support of its proposed construction to be persuasive for the reasons that follow. ***First***, Defendants' apparent argument that because Claim 1 mostly uses the term "memory controller" throughout, "memory controller chip" should be construed as "memory controller," is not persuasive. More specifically, it is unclear whether Claim 1 should recite "memory controller chip" throughout, like Claim 15, or whether Claim 1 should recite "memory controller" only as Defendants suggest. ***Second***, Defendants' argument that that "this construction would have been the understanding of a POSITA and is consistent with the usage in the specification as well as the patent tenet that a claim term have proper antecedent basis to avoid indefiniteness issues" is conclusory and lacks any evidence or logical reasoning. ***Third***, Defendants' argument that the term is indefinite is undercut by Defendants' proposed construction, which indicates that a POSITA would understand the meaning of this claim term with reasonable certainty. ***Finally***, defendants in prior cases did not assert indefiniteness against this term.

The Court agrees with Plaintiff that Defendants' proposed construction seeks to write "chip" out of the claim language. On other hand, the Court does not find most of Plaintiff's arguments in support of its proposed construction to be persuasive either for the reasons that follow. ***First***, Plaintiff's argument that the "better interpretation" is that the "'said memory controller chip imposes a limitation on the previously recited 'memory controller' must be a 'memory controller chip'" effectively seeks to add "chip" to each instance of "memory controller" in Claim 1, which is as incorrect as Defendants' proposed construction which reads "chip" out. ***Second***, with respect to Plaintiff's argument that "[c]ourts have additionally held that it is proper

for terms to recite more detail than the identified antecedent basis, and that this additional detail limits the claims," it is unclear whether adding more detail here results in the correct construction.

Between the parties' two proposed constructions, the Court finds that Plaintiff's proposed construction is the better of the two. Defendants' proposed construction suffers from the infirmity that "said memory controller" in Claims 6 and 13 would not have antecedent basis. In construing one term that lacks antecedent basis, the Court prefers not to create an antecedent basis issue for two other dependent claims. Accordingly, the Court rejects Defendants' proposed construction.

By contrast, the Court believes there are a few reasons to adopt Plaintiff's proposed construction. ***First***, unlike Defendants' proposed construction, Plaintiff's proposed construction preserves the antecedent basis for Claims 6 and 13. ***Second***, Plaintiff's proposed construction appears to encompass the embodiment in Figure 4 wherein the "memory controller chip" is coupled each of a volatile memory and the non-volatile memory. ***Third***, based on the Court's review of the specification, the Court finds that the specification does not appear to describe any difference between the "memory controller" and "memory controller chip." Rather, the specification only uses the term "memory controller" once in the specification. 1:43. Even then, the specification describes that the portable RAM drive comprises a connector, volatile memory, and non-volatile memory, *i.e.*, the same components that are depicted in Figure 4, in addition to a memory controller. 1:42–44. Therefore, between this passage and Figure 4, the specification appears to refer to these two terms interchangeably. Furthermore, the Court does not believe there is any meaningful difference between a "memory controller" and a "memory controller chip." While the latter expressly requires a chip-implementation, the Court believes that as of the priority date of the patent there has been no evidence presented of a memory controller that was not implemented on or using a chip, nor does the Court believe it would be possible to implement a

memory controller without a chip. Because the specification does not appear to make any distinction between the two terms, because the specification appears to use the terms coextensively, and because the Court has seen no evidence of a meaningful difference between the two, the Court finds that meaning of the two terms is coextensive.

With respect to Defendants' alternative indefiniteness construction, the Court does not find that this term is indefinite for at least three reasons. ***First***, Defendants provide a construction and only argue indefiniteness in the alternative, which indicates that even Defendants believe that a POSITA would understand the scope of this claim term with "reasonable certainty." *Nautilus*, 572 U.S. at 910. ***Second***, none of the defendants in the co-pending cases argued that this term was indefinite, which further indicates that the term is not indefinite. ***Third***, as described in the preceding paragraph, a POSITA would understand that the terms "memory controller" and "memory controller chip" appear to be coextensive. For at least these reasons, there does not appear to be clear-and-convincing evidence that a POSITA would not understand with reasonable certainty the scope of this term.

Therefore, for the reasons described above, the Court concludes that, in the context of the patent, the terms "memory controller" and "memory controller chip" are coextensive and should be construed according to their plain-and-ordinary meaning.

B. Term #2: "non-volatile memory"

Term	**Plaintiff's Proposed Construction**	**Defendants' Proposed Construction**
#2: "non-volatile memory" U.S. Patent No. 6,920,527, Cls. 1 and 15 Proposed by Defendants	Plain and ordinary meaning	"memory that generally requires power to maintain the memory"

The Parties' Positions:

Defendants contends that the patentee acted as his/her own lexicographer. Opening at 5. In particular, Defendants contends that "[a] portable storage medium may use non-volatile memory that generally requires power to maintain the memory" is definitional statement for non-volatile memory. *Id.* (quoting 1:32–33).

Defendants contend there is not a typo in the aforementioned sentence as it would require a large number of edits to change this sentence back to the conventional definition of "non-volatile." *Id.* Defendants further contends that the patentee did not mean "volatile memory" as that term was not introduced until later. *Id.* Defendants contends that the patent does not provide any examples of non-volatile memory that would "diminish" this alleged definition. *Id.* Defendants finally contend that, to the extent Plaintiff argues that this is inconsistent with the embodiments, a patentee's lexicography takes precedence over the embodiments. *Id.*

In its response, Plaintiff contends that dictionary definitions describe that non-volatile storage is memory that does not require a power source and that Defendants' proposed construction is literally the opposite of the conventional definition. *Id.* at 5–6, 8–9; Sur-Reply at 4. Plaintiff contends that the alleged definitional statement does not evince the requisite intent to define a term, *e.g.*, it does not say that non-volatile memories "are memories that generally require power" or that non-volatile memories "require certain features." Response at 7 (emphasis in original). Plaintiff contends that the word "generally" does not indicate an intent to assign a limiting meaning to "non-volatile memory." *Id.* at 7–8; Sur-Reply at 4.

Plaintiff contends that Defendants' proposed construction is contrary to much of the specification. Response at 9–11. More specifically, Plaintiff first points to 5:35–54 which

describes an embodiment that uses a physical restraint to prevent the user from unplugging the portable RAM drive in order to prevent the loss of data in the volatile memory when the volatile memory loses power. Response at 9–10. Plaintiff contends that Defendants' proposed construction renders this passage to be moot because transferring data from one memory that will lose its data upon a power loss (the volatile memory) to another memory that will lose its data upon a power loss (the non-volatile memory) will result in a loss of data where there is a power loss. *Id.* Plaintiff also points to 5:12–25 which describes that the purpose of the of an internal power supply is to provide enough power to transfer data from volatile memory to non-volatile memory when the portable RAM drive is unplugged. *Id.* at 10–11. Plaintiff contends that Defendants' proposed construction also renders this passage to be moot as transferring the data from volatile memory to non-volatile memory will not prevent the loss of that data when power is lost. *Id.*

Plaintiff also contends that Defendants' proposed construction is contrary to the claims. *Id.* at 11. More specifically, Plaintiff contends that both independent claims recite volatile memory and non-volatile memory—which, under Defendants' proposed construction, both need power to maintain the stored data—thus erasing the distinction between the two types of memory. *Id.*

Plaintiff contends that Defendants' proposed construction is based on a legal premise that the Federal Circuit has expressly rejected. *Id.* at 11–12. More specifically, while lexicographical intent "is a plausible reading of the excerpt in isolation, claim construction requires that we 'consider the specification as a whole, and [] read all portions of the written description, if possible, in a manner that renders the patent internally consistent.'" *Id.* at 12 (discussing *Baxalta Inc. v. Genentech, Inc.*, 972 F.3d 1341, 1347 (Fed. Cir. 2020) (quoting *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1379–80 (Fed. Cir. 2001) (alteration in original))). Plaintiff contends that, at most,

Defendants' reply argues "certain embodiments must have additional, undisclosed elements that are critical to the functional operation of those embodiments." Sur-Reply at 6.

Plaintiff contends that a large number of edits is not required as Defendants assert and provides two exemplary one-word edits. *Id.* at 7 n.4. Plaintiff finally contends that Defendants' proposed construction is inconsistent with the understanding of other defendants in co-pending litigation as the other defendants did not assert that the patentees acted as their own lexicographer. *Id.* at 13.

In its reply, Defendants contend that Plaintiff is using the rejected *Texas Digital* standard in lieu of *Phillips* by allegedly elevating extrinsic evidence (dictionary definition) over intrinsic evidence (an alleged definitional statement). Reply at 2–3. Defendants also contend that Plaintiff's edits actually support its proposed construction. Reply at 3. More specifically, Defendants contend that one of Plaintiff's potential edits confirm that the passage describes that "certain non-volatile memories ***may*** require power to maintain the memory." *Id.* (emphasis in original). Similarly, Defendants contend that the other one of Plaintiff's potential edits confirm that the passage describes that "the subject sentence is directed to *non-volatile* memories not *volatile* memories." *Id.* at 3–4 (emphasis in original).

With respect to Plaintiff's argument that Defendants' proposed construction renders moot passages in the specification, Defendants contend that these disclosures "do[] not preclude a further dedicated power source required by the non-volatile memory," and, as such, the "patent excerpts discussing an internal power source dedicated to data transfer between the memories are not inconsistent with Defendants' proposed construction." *Id.* at 5. Defendants relatedly contend that the specification does not preclude a non-volatile memory from having an internal power source. *Id.* at 6.

With respect to Plaintiff's argument that Defendants' proposed construction erases the distinction between volatile and non-volatile memory, Defendants contend that volatile and non-volatile memories have different access speeds and that is why the claims include both. *Id.* at 5.

Finally, with respect to Plaintiff's arguments that other defendants have not asserted lexicography, Defendants contend that this is irrelevant as it matters only what the inventor intended. *Id.* at 6.

In its sur-reply, Plaintiff contends that Defendants' arguments regarding the compatibility of its proposed construction with the passages Plaintiff cited in its response boil down to "the specification is not technically, necessarily inconsistent with Kingston's proposed construction if one were to assume that the specification contemplated the presence of additional highly relevant (but inexplicably undisclosed) elements." Sur-Reply at 5.

With respect to Defendants' argument that access speed differentiates volatile memory and non-volatile memory in the claims, Plaintiff contends that neither party has proposed a construction of this term based on access speed, so this difference is immaterial. *Id.* at 5–6.

The Court's Analysis:

After reviewing the parties' arguments and considering the applicable law, the Court does not find that the patentees acted as their own lexicographer and adopts Plaintiff's proposed construction.

To act as their own lexicographer, the patentees must "clearly set forth a definition of the disputed claim term," and "'clearly express an intent' to [define] the term." *Thorner*, 669 F.3d at 1365. The Court does not find that Defendants have shown that both elements are present here.

With respect to the first element—providing a clear definition—the Court finds that Defendants have not shown that the alleged definitional statement meets the "exacting" standard necessary to support a conclusion a patentee acted as his/her own lexicographer for at least the following reasons. *Hill-Rom Servs.,* 755 F.3d at 1371. ***First***, the alleged definitional contains uses permissive, but not obligatory, words, *e.g.*, "generally requires." The words "generally requires" is hardly a clear definition as it could mean that 50.1% of the time the non-volatile memory requires power while 49.9% of the time it does not. Based on that understanding, the Court does not believe that this choice of words constitutes a "clear definition." ***Second***, Defendants' proposed construction effectively redefines "non-volatile memory" to be "volatile memory" with respect to the volatility of data. Absent a statement that is significantly clearer (*e.g.*, "We define a non-volatile memory to be…"), the Court does not believe that a POSITA would understand that the patentees acted as their own lexicographer in this particular passage.

With respect to the second element—evincing a clear intent to define the term —the Court again finds that Defendants have not carried their "exacting" burden for at least the reasons that follow. ***First***, the alleged definition is at odds with the plain-and-ordinary meaning—in fact, it has the exact opposite meaning–which makes it harder to believe that the patentee intended such a polar opposite definition, especially as compared to the alternative of a typo.

Second, the Court agrees with Plaintiff that the claims indicate that this is not a definitional statement because it collapses the difference between "non-volatile" and "volatile." The Court does not find Defendants' counter-argument that access speed provides a difference between the two to be persuasive. In particular, while access speed may be one difference between "non-volatile" and "volatile," it is not the only difference and certainly does not explain the meaning of "volatile." Furthermore, a POSITA would think that access speed has very little—if anything—

to do with having an internal power source. And a POSITA would consider access speed to be irrelevant when the device is not plugged into a computer as there is no data transfer when the device is not plugged in. Additionally, a difference in access speed does not explain why a physical restraint is necessary, but a difference in the volatility does.

Third, the Court finds that the specification tends to contradict this definition, rather than support it, which indicates that the patentees did not intend to act as their own lexicographer in this passage. *Baxalta*, 972 F.3d at 1347. While Defendants appear to point only to this sentence for support that the patentees elected to act as their own lexicographer, Plaintiff, by contrast, provides two examples from the specification that indicate that the alleged definitional sentence was not a definition. The Court finds that Defendants' attempt to explain away those two examples are attorney argument that assume there are unstated aspects to the invention in order to minimize any contrary evidence and is unsupported by ***any*** other evidence anywhere else in the specification (or claims).

Fourth, with respect to Defendants' argument that Plaintiff improperly elevates extrinsic evidence over intrinsic evidence, the Court disagrees. Plaintiff merely quoted dictionary definitions to describe what the plain-and-ordinary meaning was, how the alleged definitional statement was the opposite of the plain-and-ordinary meaning, and then described how the rest of the intrinsic evidence did not support Defendants' proposed construction, but rather agreed with the plain-and-ordinary meaning, as described in the quoted dictionaries.

Finally, the fact that other defendants in co-pending litigation did not assert that this sentence was a definitional statement confirms the Court's conclusion that the patentees did not acts as their own lexicographer.

Based on the above, the Court concludes that the only logical conclusion is that the passage includes a typo. More specifically, the Court concludes that the disputed passage should have been written as follows, "A portable storage medium may use non-volatile memory that generally [does not] requires power to maintain the memory."

Therefore, for at least these reasons, the Court finds that the patentees did not act as their own lexicographer and that this term should be construed according to its plain-and-ordinary meaning.

C. Term #3: "when said connector couples said portable memory apparatus to said computer system"

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
#3: "when said connector couples said portable memory apparatus to said computer system" U.S. Patent No. 6,920,527, Cl. 1 Proposed by Defendants	Plain and ordinary meaning	"in response to the portable memory apparatus being plugged into the computer system by the connector"

Judge Albright previously construed this term as "plain-and-ordinary meaning" in the prior co-pending cases. Response at 13. That said, Defendants' proposed construction is slightly different than the defendants' proposed construction in the prior co-pending cases. *Id.* at 14.

The Parties' Positions:

In its opening, Defendants frame the issue as "whether this term refers to a particular point in time or anytime that the portable device is connected to a computer system – especially replacing the 'when' it is plugged in with a 'while' it is plugged in." Opening at 7. Defendants contend that

its proposed construction "rightly links the copying of the data between the memories and the computer system to the act of coupling." *Id.* Defendants contend that its proposed construction is "not intended to create some impossible standard where the claimed copying must be immediately upon coupling with absolutely no intervening events. As the specification explains, the copying is in response to the coupling - not infinitesimally afterwards." *Id.* at 8.

In its response, Plaintiff contends Defendants provide "no support" for its proposed construction other than making a conclusory allegation and that Defendants make "no effort" to explain why the "specification's 'when' means 'in response to.'" Response at 14. Plaintiff contends that causation requires that one event happen after another, but it does not mandate a particular timeframe for the second event to occur. *Id.* Plaintiff contends that Defendants' proposed construction does not specify what degree of causation "in response to" requires, nor what an acceptable timeframe is. *Id.* Plaintiff contends does not provide any evidence in support of "its particular point in time" insertion. *Id.* at 15.

In its reply, Defendants contend that the only "triggering event" described in the specification is the coupling of the portable RAM drive to the computer. Reply at 6. Defendants contend that Claim 1's recitation of "when said connector couples … said memory controller chip copies…" supports its triggering argument. *Id.* at 7. Defendants contend that the only other interpretation (that the memory controller chip continuously copies data for the entire time the portable RAM drive is coupled) is nonsensical. *Id.*

In its sur-reply, Plaintiff first says that Defendants' position changed from "timing" to "triggering." Sur-Reply at 7. Plaintiff contends that "when" does not necessarily mean causation and uses the example of "read[ing] a book when the sun is shining." *Id.* at 8. Plaintiff also contends

that Defendants have not provided any support for the concept that the only other meaning for "when" is continuous copying, and again uses the book/sun example. *Id.*

The Court's Analysis:

After reviewing the parties' arguments and considering the applicable law, the Court agrees with Plaintiff and adopts Plaintiff's proposed construction.

While Defendants contend that the term needs construction, the Court finds that Defendants have overcome the "heavy presumption" that plain-and-ordinary meaning applies for the reasons that follow. *Omega Eng'g*, 334 F.3d at 1323. ***First***, Defendants do not argue lexicography or disclaimer, which are the only permissible deviations from plain-and-ordinary meaning. *Thorner*, 669 F.3d at 1365. ***Second***, Defendants have not identified anything in the claim that a POSITA or a lay jury would not understand. More specifically, Defendants focus on the word "when," but have not explained why the meaning and scope of that word would be unclear for a POSITA or difficult for a lay jury to apply. *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004) ("The district court simply must give the jury guidance that can be understood and given effect by the jury once it resolves the issues of fact which are in dispute."). Rather, Defendants' proposed construction appears to paraphrase—while limiting the claim scope—the claim language. At best, Defendants' proposed construction is "an obligatory exercise in redundancy," which the Federal Circuit has held to be unnecessary. *United States Surgical Corp.*, 103 F.3d at 1568. ***Finally***, Defendants' reason why this term needs construction shifts between its Opening and Reply briefs, which tends to indicate there may be no ambiguity in the claim term. More specifically, in Defendants' Opening brief, Defendants contended there was a timing issue while in its Reply brief, Defendants contend that there's a triggering issue. In either case, Defendants

has not shown that a POSITA would not understand the claim scope or that a lay jury would not be able to apply this claim term.

Therefore, for at least these reasons, the Court finds that this term should be construed according to its plain-and-ordinary meaning.

D. Term #4: "transfers"

Term	**Plaintiff's Proposed Construction**	**Defendants' Proposed Construction**
#4: "transfers" U.S. Patent No. 6,920,527, Cl. 6 Proposed by Defendants	Plain and ordinary meaning	Plain and ordinary meaning including "copies"

The Parties' Positions:

In its opening, Defendants again allege lexicography. Opening at 8. In particular, Defendants point to: "[a]s used herein, 'transfer' may refer to copying data to another memory medium without erasing data in an originating memory medium or making changes to data stored in another memory medium to reflect changes in the data on the originating memory medium. Other transfers are also contemplated." *Id.* (quoting 3:62-67).

In its response, Plaintiff contends that this passage is not a definition as it uses non-limiting language, *e.g.*, "may," and describes two alternatives. Response at 15. Plaintiff also contends that this passage also recites that "[o]ther transfers are also contemplated," which further indicates that the passage is not limiting and thus not a definition. *Id.* at 15–16. Plaintiff also contends that Defendants do not provide any basis for limiting the examples to "copying." *Id.* at 16.

In its reply, with respect to Plaintiff's last point, Defendants contend that they are amenable to broadening their proposed construction to include all examples recited in the specification. Reply at 8. Defendants contend that Plaintiff is improperly elevating extrinsic evidence (its expert declaration) above intrinsic evidence. *Id.* at 7. Defendants allege that Plaintiff attempts to substitute in "write" for "transfer," and contend that the patentee's word choice must be respected. *Id.* at 8–9.

In its sur-reply, Plaintiff contends that Defendants do not make any arguments why the passage is limiting nor rebut any of Plaintiff's points why the passage is non-limiting. Sur-Reply at 8–9.

The Court's Analysis:

After reviewing the parties' arguments and considering the applicable law, the Court does not find that the patentees acted as their own lexicographer and adopts Plaintiff's proposed construction.

As described above, the standard for lexicography is that there must be a "clear definition" and "clear expression of intent." The Court finds that Defendants have not met either requirement. With respect to the clear definition requirement, the passage Defendants focuses on hardly constitutes a clear definition. In particular, the alleged definitional passage uses permissive, non-limiting language ("may"), expressly describes two alternatives ("copying data to another memory medium without erasing data in an originating memory medium" and "making changes to data stored in another memory medium to reflect changes in the data on the originating memory medium"), and expressly describes that this claim term includes other embodiments ("Other

transfers are also contemplated"). Based on these reasons, the Court does not find that this passage recites a clear definition.

With respect to the clear expression of intent requirement, the passage uses open-ended language ("may refer"), which indicates that the patentee did not intend for this statement to be a lexicographical one. Furthermore, the fact that the passage describes that "[o]ther transfers are also contemplated" further indicates that the patentee did not intend the previous sentence to be definitional.

Based on these reasons, the Court finds that this passage fails to meets the "exacting" requirements necessary for lexicography. *Hill-Rom Servs.*, 755 F.3d at 1371.

Therefore, for at least these reasons, the Court finds that the patentees did not act as their own lexicographer and that this term should be construed according to its plain-and-ordinary meaning.

E. Term #5: "wherein said memory controller chip transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system"

Term	**Plaintiff's Proposed Construction**	**Defendants' Proposed Construction**
#5: "wherein said memory controller chip transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system" U.S. Patent No. 6,920,527, Cl. 6 Proposed by Defendants	Plain and ordinary meaning	Indefinite

Judge Albright previously found this term to be not indefinite and that it should have its plain-and-ordinary meaning. *See Sonrai*, Case No. 6-21-cv-00400, ECF No. 55 at #9.

The Parties' Positions:

In its opening, Defendants assert two bases for indefiniteness. First, Defendants contend that it is impossible to "transfer" non-volatile memory as it is a physical structure and cannot be moved in the manner suggested by the claim. Opening at 9. Given this physical impossibility, Defendants claim that the term is indefinite. *Id.* Second, Defendants also contend that the claim is indefinite given it could be interpreted in two equally plausible ways. *Id.* at 9–10. The first interpretation is "transfer data to non-volatile memory from volatile memory," while the second interpretation is "transfer data from non-volatile memory to volatile memory." *Id.*

In its response, Plaintiff contends that "write" is a "form" of "transfer," which then makes the meaning of the term clear, *i.e.*, "wherein said memory controller chip [writes] said non-volatile memory with data [in] said volatile memory…" Response at 16. Therefore, Plaintiff contends that Defendants are wrong that it recites a physical impossibility. *Id.*

With respect to Defendants two equally plausible interpretations argument, Plaintiff agrees that Defendants' first possibility (*i.e.*, "transfer data to non-volatile memory from volatile memory") is the correct interpretation. *Id.* at 17. But Plaintiff contends that the second possibility (*i.e.*, "transfer data from non-volatile memory to volatile memory") is not plausible as it is duplicative with a limitation in Claim 1 on which Claim 6 depends. Response at 17 (quoting Cl. 1, Lim. [f] ("said memory controller chip copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector.").

In its reply, Defendants contend that Plaintiff's argument relies on extrinsic evidence (an expert declaration). Reply at 9. Defendants further argue that because "transfer" and "write" are different words, they must have different meanings. *Id.* Defendants contend that although Plaintiff agrees with it that there are two possibilities, which one is the correct interpretation cannot be objectively determined. *Id.* at 10.

In its sur-reply, Plaintiff reminds the Court that it is Defendants' burden to prove, by clear-and-convincing evidence, that the claim is indefinite. Sur-Reply at 9. Plaintiff also reminds the Court that it previously construed this term to be not indefinite in the prior co-pending litigation. *Id.* at 10. Plaintiff notes that Defendants do not dispute the expert declaration and that the expert declaration is fully consistent with the specification. *Id.* at 9. With respect to Defendants' argument that because "transfer" and "write" are different words and thus have different meanings, Plaintiff contends its expert's declaration to the contrary is undisputed. *Id.* at 9–10.

The Court's Analysis:

After reviewing the parties' arguments and considering the applicable law, the Court agrees with Plaintiff that the term is not indefinite and adopts Plaintiff's proposed construction.

As described in the background section, the entire purpose of the patent is to add a volatile memory (which has a faster access speed, as compared to non-volatile memory, but which loses its data upon power loss) between the non-volatile memory and the computer which allows for faster effective read and write speeds of the portable RAM drive by the computer. When the portable RAM drive is plugged in, the memory controller chip copies a subset of the data from the non-volatile memory to volatile memory. By contrast, when the portable RAM drive is unplugged (or about to unplugged), the memory controller chip does a "write-back" of the data in the volatile

memory to non-volatile memory, *i.e.*, the memory controller chip copies the updated data from volatile memory to non-volatile memory. Accordingly, based on these teachings from the specification, a POSITA would not understand that "transfers" requires physically moving the non-volatile memory.

The Court agrees with Plaintiff that of the two allegedly equally plausible interpretations, a POSITA would understand that this claim term is directed towards the first interpretation for at least two reasons. ***First***, under the second interpretation that the memory controller chip transfers data from non-volatile memory to volatile memory, the limitation in Claim 6 is redundant with Limitation [f] in Claim 1 ("said memory controller chip copies data from said non-volatile memory to said volatile memory, and said computer system accesses said data in said volatile memory through said connector") (emphasis added). The Court finds that the second interpretation violates the principle of claim differentiation. *Phillips v. AWH Corp.*, 415 F.3d 1303. 1315 (Fed. Cir. 2005) ("the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim."). While claim differentiation is only a presumption, which may be rebutted, Defendants do not provide any evidence or argument to indicate that this presumption should not be rebutted.

With respect to Defendants' argument that Plaintiff's proposed construction is incorrect because it conflates "transfer" and "write" (and potentially "copying")—which are different words, so they must have different meanings—the Court agrees with the premise that "transfer" and "write" are different words with different meanings, but disagrees with Defendants' ultimate conclusion that Plaintiff's proposed construction is incorrect. More specifically, in electronic memories, "copying" and "writing" have the same meaning in that data from one memory is written to a second memory. "Transferring" implies that the data is moved from one memory to a

second memory. To implement a transfer requires two actions: (1) writing data from the first memory to the second memory and (2) erasing data from the first memory. *See* 3:62–67. Unlike objects such as books, there is no way to "transfer" data from one memory to a second in a single step; rather, "transferring" data entails both copying and erasing actions. Accordingly, while the Court agrees with Defendants that "transfer" and "write" are two different words with different meanings, in the context of Plaintiff's arguments discussing the relationship between the first and second memories, Plaintiff's argument does not improperly conflate the two. More specifically, "transfer" is a "write" from one memory to another and an "erase" for the source memory. Finally, in the context of the claimed invention, whether the memory controller chip expressly erases the data in the volatile memory is a moot point as the data will automatically be erased once the volatile memory loses power.

With respect to Defendants' argument that Plaintiff elevates extrinsic evidence above intrinsic evidence, this argument is incorrect for at least two reasons. ***First***, Plaintiff does not elevate extrinsic evidence, but merely provides an expert declaration to explain what the plain-and-ordinary meaning of transfer includes, *i.e.*, it includes writes. Response, Ex. C. at ¶ 30. ***Second***, Plaintiff's expert declaration is consistent with the specification's description of transferring data from the volatile memory to the non-volatile memory. *See, e.g.*, 3:62–67.

Therefore, for at least these reasons, the Court concludes that Defendants have not provided clear-and-convincing evidence that a POSITA would not understand with reasonable certainty the scope of the claim term. As such, Court concludes that this term is not indefinite and that this term should be construed according to its plain-and-ordinary meaning.

V. CONCLUSION

In conclusion, for the reasons described herein, the Court adopts the below constructions as its final constructions.

SIGNED this 23rd day of August, 2022.

DEREK T. GILLILAND
UNITED STATES MAGISTRATE JUDGE

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
#1: "a memory controller" / "said memory controller" / "said memory controller chip" U.S. Patent No. 6,920,527, Cls. 1, 6 Proposed by Defendants	"a memory controller chip"	"a memory controller" / "said memory controller"	Plain-and-ordinary meaning
#2: "non-volatile memory" U.S. Patent No. 6,920,527, Cls. 1 and 15 Proposed by Defendants	Plain and ordinary meaning	"memory that generally requires power to maintain the memory"	Plain and ordinary meaning
#3: "when said connector couples said portable memory apparatus to said computer system" U.S. Patent No. 6,920,527, Cl. 1 Proposed by Defendants	Plain and ordinary meaning	"in response to the portable memory apparatus being plugged into the computer system by the connector"	Plain-and-ordinary meaning

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
#4: "transfers" U.S. Patent No. 6,920,527, Cl. 6 Proposed by Defendants	Plain and ordinary meaning	Plain and ordinary meaning including "copies"	Plain-and-ordinary meaning
#5: "wherein said memory controller chip transfers said non-volatile memory with data written to said volatile memory from said computer system while said portable memory apparatus is coupled to said computer system" U.S. Patent No. 6,920,527, Cl. 6 Proposed by Defendants	Plain and ordinary meaning	Indefinite	Not indefinite. Plain-and-ordinary meaning.